



Marine & Offshore

Certificate number: 27319/C0 BV

File number: MAT 71713-2012

Product code: 8154I

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

www.veristar.com

## APPROVAL CERTIFICATE for MATERIALS

*This certificate is issued to*

**Intricast Private Limited**  
RAJKOT - INDIA

*for the type of product*

**STEEL CASTINGS**

Carbon steel and Stainless steel castings with weight up to 50Kg.

**Requirements:**

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 23 Apr 2028**

**For Bureau Veritas Marine & Offshore,**

At BV MUMBAI (BOMBAY), on 23 Apr 2023,

Nitin NALAWADE

***This certificate was created electronically and is valid without signature***



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION :**

Carbon steel and stainless steel castings with maximum weight 50kg.

Steelmaking by induction furnace.

Machined/unmachined investment casting by lost wax process. Heat treatment as applicable.

### **2. DOCUMENTS AND DRAWINGS :**

2.1 - Documents issued by Intricast Private Limited:

- "Process module - Production process PM 03" dated 25 May 2009.
- "Receiving inspection quality plan RD 09" dated 15 April 2004.
- "Heat treatment of different alloy RD 17" dated 01 July 2008.
- "Generic in process quality plan RD 10" dated 01 July 2011.
- "Steel casting Section 6" dated December 2011.
- "Manufacturing process data" submitted on March 2023.

### **3. TEST REPORTS :**

3.1- Typical tested grades are:

- WCB, according to ASTM A216 for Carbon steels
- CF3M and CF8M according to ASTM A351/A351M for austenitic stainless steels.

3.2 - Documents submitted by Intricast Private Limited:

- "Heat wise pouring report (daily)" dated 15 December 2011.
- "Melting log" dated 15 December 2011.
- Tensile test results, impact tests and chemical analysis dated 29 December 2011.
- Liquid penetrant examination report dated 7 February 2012.
- Test records for castings made in grade WCB – Heat No.NHBA, NHBI dated 03/10/2022.

3.3- Microstructure examination report issued by Divine Laboratory Services and dated 03 January 2012.

### **4. APPLICATION / LIMITATION :**

Chemical composition, tensile properties and Charpy-V notch test requirements are to be as per Bureau Veritas Materials Rules for Classification and/or alternative specification mentioned on reviewed drawings, as applicable.

### **5. PRODUCTION SURVEY REQUIREMENTS :**

5.1 - The steel castings are to be supplied by Intricast Private Limited in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

### **6. MARKING OF PRODUCT :**

As per Bureau Veritas Materials Rules for the Classification.

### **7. OTHERS :**

This certificate replaces approvals from No.27319/A0 BV to No.23719/B0 BV.

\*\*\* END OF CERTIFICATE \*\*\*